

15 APRIL 2003

Safety



**EXPLOSIVES, FIREARMS AND HAZARDOUS
MATERIALS (HM) TRANSPORTATION
PROGRAM**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the AFDPO WWW site at:
<http://www.e-publishing.af.mil>

OPR: 60AMW/SEW (SSgt Jeffrey Martin)

Certified by: 60AMW/SE
(Lt Col David B. Mathews)

Supersedes TAFBI 91-104, 1 February 2002

Pages: 23
Distribution: F

This instruction implements *AFPD 91-2, Safety Programs*. It establishes the Explosives, Firearms, and Hazardous Materials (HM) Transportation Safety Programs for Travis Air Force Base in accordance with *AFMAN 91-201, Explosives Safety Standards*. It applies to all 60th Air Mobility Wing, tenant units, reserve activities, and personnel assigned or attached to Travis AFB.

SUMMARY OF REVISIONS

This document revises the base entry procedures for explosives loaded vehicles, paragraph **12**. Updates unit designations and office symbols. Added Paragraph **22.3**, prohibiting purchase of commercial explosives without prior approval. Added 60th LRS responsibilities in paragraph **13**, for surface shipment of explosives. **Attachment 2**, Formally Sited Explosive Locations, has been revised to show re-sited quantities for the Aerial Port in transit facilities (B-Bunker) and aircraft parking locations H-13 and H-14 (Hot Cargo Spots). **A bar (|) indicates a change since the last edition.**

| | | |
|----|--|---|
| 1. | Explosives, Firearms and Hazardous Materials (HM) Transportation Safety Programs. | 3 |
| 2. | Accident Prevention and Control. | 3 |
| 3. | Explosives Safety Manager (60 AMW/SEW). | 4 |
| 4. | Unit Weapons Safety Representatives. | 5 |
| 5. | Defense Re-utilization and Marketing Office (DRMO). | 5 |
| 6. | 60th Civil Engineering Squadron (60 CES). | 5 |
| 7. | 60th Equipment Maintenance Squadron (60 EMS). | 6 |
| 8. | 60TH Aerial Port Squadron (60 APS). | 6 |

| | | |
|---|---|-----------|
| 9. | Command Post (60 AMW/CP). | 7 |
| 10. | Base Operations (60 OSS/OSAA). | 8 |
| 11. | 60TH Security Forces Squadron (60 SFS). | 8 |
| 12. | Wing Plans (60 AMW/XP). | 8 |
| 13. | 60th Logistics Readiness Squadron (60 LRS). | 8 |
| 14. | Correspondence and Messages. | 9 |
| 15. | On-Base Explosives Movements. | 9 |
| 16. | Off-Base Explosives Movement. | 9 |
| 17. | Surface Explosives Shipments. | 9 |
| 18. | Air Force Occupational Safety and Health Standard (AFOSH). | 10 |
| 19. | Task Qualification. | 10 |
| 20. | Explosives Storage Licensing. | 11 |
| 21. | Exceptions to Explosives Licensing Requirements. | 11 |
| 22. | Prohibitions. | 11 |
| 23. | Placarding of Explosives Loaded Aircraft. | 11 |
| 24. | Mishap Reporting. | 11 |
| 25. | Exercises Involving Live Explosives. | 11 |
| 26. | Inspections and Testing of Lightning Protection and Static Ground Systems. | 12 |
| 27. | Vehicle Accidents Involving DOD Munition and Explosives. | 12 |
| 28. | Weapon Clearing and Transfer Procedures. | 13 |
| 29. | Explanation of Terms. | 13 |
| 30. | Forms Adopted. | 14 |
| Attachment 1— GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION | | 15 |
| Attachment 2— FORMALLY SITED EXPLOSIVE STORAGE LOCATIONS (A- BUNKER) | | 16 |
| Attachment 3— FORMALLY SITED AIRCRAFT PARKING LOCATIONS | | 20 |
| Attachment 4— FORMALLY SITED AIRCRAFT PARKING OVERVIEW | | 22 |

1. Explosives, Firearms and Hazardous Materials (HM) Transportation Safety Programs.

1.1. These programs involve all explosives and other HM regulated by public law and the Department of Defense (DoD), firearms used, handled, stored, and maintained on Travis AFB. Implementation of effective safety programs must be equally shared by the host and tenant units and supported by all levels of management supervision and operations. Overall objective of the programs is to prevent and/or minimize property damage, injury, and loss of life. The cardinal rule of Explosives Safety is: Expose the minimum amount of people to the minimum amount of explosives for the minimum amount of time. Implementation of these programs will be accomplished by:

- 1.1.1. Coordination between host and tenant representatives in explosives, firearms and HM transportation operations.
- 1.1.2. Enforcement of and compliance with safety regulations, standards, and application of safety engineering principles.
- 1.1.3. Recurring inspections of operations and facilities for identification and elimination of hazards.
- 1.1.4. Investigating, analyzing, and reporting of accidents and incidents.
- 1.1.5. Use of technically qualified personnel and proper equipment operators.
- 1.1.6. Adequate training for personnel on a continuing basis.
- 1.1.7. Review of selected potentially dangerous operations by the Mishap Prevention Council.
- 1.1.8. Review and evaluation of reports on surveys and visits conducted by higher headquarters.

2. Accident Prevention and Control.

2.1. All organizational elements, including tenants, having a mission or participating functions involving explosives, HM transportation and handling of firearms are responsible for execution of effective accident prevention programs, and will:

- 2.1.1. Recognize, review, and enforce accident prevention and damage control techniques, procedures, and requirements.
- 2.1.2. Coordinate all unusual/significant matters pertaining to explosives, HM transportation and firearms operations with Weapons Safety (60 AMW/SEW).
- 2.1.3. Comply with AFJMAN 24-204, *Preparing Hazardous Material for Military Air Shipments*, AFI 31-207, *Arming and Use of Force for Air Force Personnel* and AFMAN 91-201 requirements.
- 2.1.4. Ensure operating instructions (OI's) covering all explosives operations are maintained. Locally developed OI's and instructions will contain information outlined in AFMAN 91-201, Paragraph 2.4., and will be coordinated with the Weapons Safety Manager (60 AMW/SEW) and any other involved activity. Approval will be by the squadron commander. For those activities assigned to headquarters squadrons, approval will be by the flight or division chief. Coordination/approval of local written procedures will be accomplished using AF Form 673, **Request to Issue Publication** or appropriate coordination documentation. Each locally issued publication will be reviewed annually by the functional manager and Weapons Safety Manager. Reviews will be documented.

- 2.1.5. Use personnel qualified through training and/or experience to ensure application of accident prevention principles and safety standards.
- 2.1.6. Notify the Fire Alarm Control Center (60 CES/CEF) when explosives locations or fire symbols/hazard markers change.
- 2.1.7. Forward all requests for waivers, exemptions, and deviations from mandatory provisions of AFMAN 91-201 to 60 AMW/SEW for review prior to submitting to the 60 AMW Commander for signature and forwarding to HQ AMC for approval.
- 2.1.8. Request AF Form 2047, **Explosives Facilities License** for locations where explosives operations are conducted. Exception: AF Form 2047 is not required for formally sited explosives locations, locations storing less than 1000 rounds of class/division 1.4 small arms ammunitions or cartridges for cartridge actuated tools, and location storing thermal batteries.
- 2.1.9. Ensure assigned vehicles and equipment are operated and serviced in compliance with AFMAN 91-201, Paragraph 2.74. for on and off base transport of explosives.
- 2.1.10. Provide vehicle/equipment operators with regulatory information on hauling explosives and hazardous materials.
- 2.1.11. Ensure that munitions components or other items containing explosives or hazardous material are not brought into or stored in an office, barracks, warehouse, hangar, or other structure not specifically authorized or licensed for such storage.

3. Explosives Safety Manager (60 AMW/SEW).

- 3.1. Review and coordinate on operating instructions for all explosives, HM transportation and fire-arms operations conducted on Travis AFB, including tenant organizations.
- 3.2. Perform spot inspections of activities and operations involving explosives, HM transportation, and firearms to ensure compliance with listed safety directives. Submit pertinent reports of unsatisfactory conditions noted and ensure corrective action or actions by activities concerned.
- 3.3. Perform annual inspections of explosive storage locations for compliance with safety criteria, prepare report to appropriate agencies, and ensure adequacy of corrective action.
- 3.4. Provide guidance/technical assistance to all organizations involved in explosives, HM transportation, and firearms operations.
- 3.5. Review, coordinate, and recommend approval or disapproval for the 60 AMW Commander on new site plans or modification of explosives facilities or facilities not involving explosives which would be exposed to such hazards if not properly located.
- 3.6. Evaluate, review, and process requests for waivers, exemptions, and deviations to explosive safety criteria and recommend approval or disapproval.
- 3.7. Investigate and ensure proper processing of accident/incident report and hazard reports involving explosives.
- 3.8. Approve or disapprove requests for, and ensure compliance with, explosives facility licensing (AF Form 2047) requirements.
- 3.9. Recommend approval or disapproval for deviation from mandatory quantity distance criteria when required by emergency conditions or operational necessity.

- 3.10. Coordinate plans and policies involving explosive materials.
- 3.11. Serve on boards, committees, and councils, attend meetings/conferences when explosives, HM transportation, and firearms safety are involved.
- 3.12. Review agreements between both 60 Air Mobility Wing and other units for compliance with explosives, HM transportation, and firearms safety directives.
- 3.13. Provide initial and annual explosives safety training to unit explosive safety representatives.

4. Unit Weapons Safety Representatives.

- 4.1. **Organizational commanders** will appoint weapons safety representatives in each activity involved in storing, maintaining, installing, removing, or functioning of explosives within the unit. This may be the supervisor or assistant supervisor of the activity. In some units, it may be desirable for the commander to appoint a single representative to oversee the weapons safety program for all of the unit's weapons safety related activities. Provide the name, office symbol, and telephone number of appointed weapons safety representatives to 60 AMW/SEW.
- 4.2. Unit Weapons Safety Representatives are required to provide initial and annual explosives safety training to individuals within the unit who are involved in explosives operations. This training is in addition to job proficiency training provided by the supervisor. Record such training on AF Forms 1098, **Special Task Certification and Recurring Training**, AF Form 55, **Employee Safety and Health Record**, or a computer product that accurately reflects the training status.

5. Defense Re-utilization and Marketing Office (DRMO).

- 5.1. Receive, store, and dispose of munitions components, and packing materials certified as properly inspected, processed, and suitable for sale to private and commercial purchasers.
- 5.2. Contact Munitions Management Element (60 EMS/MXMW) personnel to inspect the out loading of any suspect scrap metal shipment to a civilian buyer, when required.
- 5.3. Comply with DOD guidance for disposition of scrap metal generated from items containing explosives.
- 5.4. Maintain a current listing of authorized munitions inspectors.
- 5.5. Maintain a current local operating instruction detailing correct turn-in procedures for munitions residue and emergency actions in the event of a mishap.

6. 60th Civil Engineering Squadron (60 CES).

- 6.1. Ensure preparation and submission of site plans and projects involving explosive safety are in compliance with AFMAN 91-201, Chapter 4. All site plans submitted for base facilities or land use will be coordinated with the Base Weapons Safety Manager (60 AMW/SEW).
- 6.2. Coordinate with 60 AMW/SEW to ensure existing and proposed explosives facility and explosives safety quantity-distance clearance zones are shown on Tabs C and M of the base master plan, information reflected is current, and all major master reproducible are current and complete.
- 6.3. Provide inspection and testing of lightning protection and static ground systems, vegetation control, and fire protection support for all units handling or storing explosives.

6.3.1. Maintain test and inspection records for a minimum of six inspection cycles for explosives locations lightning protection and grounding systems. Submit a copy of test results to the facility user.

6.4. Ensure that base maps and pre-fire plans show all current explosives storage areas or locations and their applicable fire symbols or hazard markers are maintained at the Fire Alarm Communications Center.

6.5. Ensure that fire drills are conducted at least semi-annually at 60 EMS (A-Bunker) and 60 APS (B-bunker) explosives storage areas. The drills will be coordinated with personnel occupying the areas to ensure that they are all aware that only a drill is to be conducted.

6.6. Perform necessary maintenance on explosive facilities consistent with explosive safety standards.

7. 60th Equipment Maintenance Squadron (60 EMS).

7.1. Coordinate with 60 AMW/SEW on all plans, unsatisfactory reports in accordance with (IAW) T.O. 00 35D-54, *USAF Deficiency Reporting and Investigating System*, and programming actions involving explosives.

7.2. Ensure information on restricted, suspended, and released lots of munitions is promptly distributed to affected agencies.

7.3. Ensure all authorized munitions serviceability inspections and tests are performed IAW appropriate 11-series technical orders for stocks in base storage, in the possession of activities assigned, or attached to Travis AFB. In transit munitions are excluded from this requirement.

7.4. Provide in transit munitions storage support, when possible, during increased munitions shipments which exceed 60APS's explosives storage capacity.

7.5. Inspect, certify, and dispose of Munitions residue IAW T.O. 11A-1-60, *Inspection of Reusable Munitions Containers and Scrap Material Generated from Items Exposed to or Containing Explosives*. Munitions Residue Inspectors will be appointed in writing by the 60 EMS Munitions Flight Chief/OIC or Squadron Commander. Provide a list of authorized inspectors, certifiers and verifiers to DRMO.

7.6. When required, provide technically qualified guidance and supervisory assistance in support of any Travis AFB explosives operation.

7.7. Ensure proper controls are in effect for supply transactions of explosives to preclude unauthorized procurement or disposition. Request for local purchase munitions/explosives must be approved by the base Munitions Accountable System Officer (MASO), Environmental Management, EOD, and 60AMW/SEW prior to submitting request to the Chief of Supply. All purchases of explosives will be IAW AFI 21-201, *Management and Maintenance of Non-Nuclear Munitions*, and will be limited to quantities that can be consumed within a 30-day period.

7.8. Ensure qualified Technical Specialists are appointed to certify explosives shipments by military aircraft. Technical Specialists must have satisfactorily completed required training as outlined in AFJ-MAN 24-204.

8. 60TH Aerial Port Squadron (60 APS).

- 8.1. Ensure all explosives and other hazardous material operations are under the direct supervision of personnel who thoroughly understand the hazards and risks involved.
- 8.2. Ensure all explosives operations are controlled by approved operating instructions and personnel are properly instructed before starting the operation(s).
- 8.3. Maintain written procedures for the implementation of tier 2 munitions operations when high fragmenting category (18) or (21) munitions are present on the Hotel Ramp or "B-Bunker" area.
- 8.4. Ensure Reports of Discrepancies (RODS) are accomplished when deficiencies are noted in shipments.
- 8.5. Ensure that personnel most knowledgeable of the requirements accomplish inspection and certification of hazardous materials shipments. Personnel must be authorized in writing to accomplish Shipper's Declaration for Dangerous Goods.
- 8.6. Establish procedures to ensure all surface shipments arriving via commercial carrier are directed to the proper location for inspecting/holding/delivery IAW Paragraph 17.
- 8.7. Information Control will ensure Command Post Operations Controllers receive a copy of AMC Form 4080, **Load/Sequence Breakdown Worksheet**, for each departing mission containing hazardous materials (HM) scheduled for airlift. Information will include HM class/division number, compatibility code, inhabited building distance (IBD) if applicable, gross weight, net explosives weight (NEW), position on aircraft, and number of pieces. This information will be provided for departing aircraft.
- 8.8. Prepare, process, and dispatch complete information for hazardous cargo on the departure message required by AMCI 24-101, Volume 9, *Air Terminal Operations Center*.

9. Command Post (60 AMW/CP).

- 9.1. Coordinate with interested activities to ensure compliance with explosives and hazardous materials movement requirements.
- 9.2. Ensure personnel performing actions involving explosives/hazardous materials are familiar and comply with the following:
 - 9.2.1. Mission briefings and tower reporting IAW AFJI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Material*, AFJMAN 24-204, and AMCI 24-101, Volume 9.
 - 9.2.2. Operational requirement for aircraft hauling DoD sponsored cargo under DOT-exemption-7573 (DoD Contract Airlift).
 - 9.2.3. Procedures for parking aircraft loaded with hazardous cargo at authorized and designated spots and for ensuring the authorized NEW for the location is not exceeded.
- 9.3. When it has been determined that the mandatory quantity-distance requirements of AFMAN 91-201 cannot be met due to an emergency condition or *unpredicted* operational necessity, contact the Weapons Safety Manager or Chief of Safety to obtain the 60 AMW Commander's approval for a *one-time, 72 hour* Emergency Event Waiver IAW AFMAN 91-201, Chapter 5.
- 9.4. Develop OI's or checklist governing incoming and outgoing aircraft laden with explosives/hazardous materials, Safe Haven requests, or requests for assistance involving DoD explosives shipment mishaps.

9.5. Pass hazardous materials load information on arriving/departing aircraft to Base Operations.

10. Base Operations (60 OSS/OSAA).

10.1. Verify completion of hazardous materials information on flight plans.

10.2. Notify the Base Fire Department of the pending arrival/departure of aircraft transporting hazardous materials and when aircraft with hazardous materials have departed.

11. 60TH Security Forces Squadron (60 SFS).

11.1. All commercial carriers transporting explosives will enter Travis AFB via the South Gate only. See paragraph 17. of this instruction for duty and non-duty hour's entry procedures.

11.1.1. Any arrivals at gates other than the south gate will be turned around and directed to the South Gate by Security Forces Personnel. Use the most direct route taking into consideration the least populated areas.

11.2. Maintain Law Enforcement Desk checklist detailing Security Forces procedures during the loading and unloading of high fragmenting category (18) or (21) munitions on the Hotel Ramp.

12. Wing Plans (60 AMW/XP).

12.1. Coordinate all operational plans and programming actions and support agreements involving explosives with 60 AMW/SEW.

13. 60th Logistics Readiness Squadron (60 LRS).

13.1. Ensure all explosives and other hazardous material operations are under the direct supervision of personnel who thoroughly understand the hazards and risks involved.

13.2. Ensure all explosives operations are controlled by approved operating instructions and personnel are properly instructed before starting the operation(s).

13.3. Ensure Reports of Discrepancies (RODS) are accomplished when deficiencies are noted in shipments.

13.4. Establish procedures for the inspection of incoming/outgoing hazardous materials loaded vehicles using DD Form 626, **Motor Vehicle Inspection (Transporting Hazardous Material)**.

13.5. Ensure all hazardous material shipments departing Travis AFB via surface mode are properly loaded, blocked, braced, and appropriate shipping documents are prepared IAW applicable directives.

13.6. Ensure that personnel most knowledgeable of the requirements accomplish inspection and certification of hazardous materials shipments. Personnel must be authorized in writing to accomplish Shipper's Declaration for Dangerous Goods.

13.7. Ensure Military Traffic Management Command (MTMC) Terminal Facilities Guide contains current information concerning storage and handling capability of Travis AFB for explosives, poisons, and biological agents.

13.8. Ensure emergency contact telephone numbers and shipment specific hazard information is included on shipping papers as directed in Paragraph 27.4.

14. Correspondence and Messages.

14.1. All activities will immediately advise 60 AMW/SEW of correspondence and messages (including classified), for which they are OPR, relating to unusual or abnormal handling, use, storage, or movement of explosives on Travis AFB.

15. On-Base Explosives Movements.

15.1. Transport vehicles will be placarded to identify the highest hazard being transported. (**Exception: HC/D 1.4 explosives do not require placards on base.**)

15.2. Hazard Class/Division 1.1, 1.2.X and 1.3 explosives loaded vehicles will use the vehicle routes prescribed in [Attachment 4](#). Access to the Sugar Area should be via the Perimeter Road or across the North Runway at Taxiway "D". Vehicles accessing the Sugar Area via Taxiway "D" will do so under the escort of a vehicle radio equipped for Tower frequency. The escort vehicle will obtain clearance from the tower to cross the runway. Base Operations will be notified of vehicles requiring access to the Sugar Area via Taxiway "D".

15.3. Vehicles transporting small quantities of explosives to locations not accessible via the established routes ([Attachment 4](#)) will proceed to their destination via the most direct route, avoiding built up areas as much as possible.

16. Off-Base Explosives Movement.

16.1. For transporting military explosives and munitions not on a Air Force installation, but in an Air Force conveyance, operated by Air Force personnel, the rules in Title 49CFR, *Transportation*, must be applied to the extent they are prescribed in USAF/DOD directives.

16.2. Transport vehicles will be placarded to identify the highest hazard being transported. (Exception: 1000 lbs. or less gross weight of 1.4 explosives does not require placards.)

16.3. Drivers will be qualified on transport vehicle, inspect transport vehicle using DD Form 626, and complete DD Form 836, **Dangerous Goods Shipping Paper and Emergency Response Information**, identifying all hazardous cargo being transported.

16.4. DD Form 836s must be certified by qualified Traffic Management Office (TMO) personnel who have completed a "Hazard Material Preparer Course" or qualified Technical Specialist as outlined in AFJMAN 24-204.

17. Surface Explosives Shipments.

17.1. When explosives-loaded vehicles arrive at the South Gate while the gate is manned by Security Forces personnel, the gate guard will phone ATOC to inform them of the truck arrival. ATOC will ask the gate guard to direct the truck to the B-Bunker. ATOC will notify the LRS Truck Dock personnel that the truck is being directed to the B-Bunker. LRS Truck Dock personnel will send a representative to the B-Bunker to inspect the truck IAW paragraph [13.4](#).

17.2. B-Bunker/LRS personnel will check the shipment documentation and accomplish the necessary inspections and processing IAW paragraph [13.4](#). If abnormalities are detected, during the vehicle inspection, the vehicle will be escorted to the suspect vehicle area located at the railhead. If the documentation reveals the shipment is destined for 60 EMS/MXMW, the Munitions Flight will be con-

tacted. Munitions personnel will proceed to the B-Bunker to take delivery of the munitions or escort the driver to the desired location.

17.3. Commercial vehicles arriving after duty hours (1530-0730) will be afforded access to the base for parking until delivery can be accepted.

17.3.1. Drivers will contact ATOC at the phone number posted on the sign located on the outside of the South Gate.

17.3.2. ATOC will call the Security Forces Control Center and request an escort for the vehicle to the railhead for temporary holding. Security Forces personnel will instruct the driver as to the carrier's responsibility to maintain security surveillance until delivery is accepted.

17.3.3. ATOC will notify LRS Truck Dock and Security Forces personnel of the truck arrival. LRS Truck Dock personnel will send a representative to the South gate to inspect the truck IAW paragraph 13.4. LRS Truck Dock personnel will provide the net explosive weight (NEW), Class/Division and inhabited building distance (IBD) to ATOC and direct the truck to the railhead. The truck driver will be informed of the responsibility to stay with the load until the next morning. ATOC will notify the Base Fire Department and Special Handling personnel with the same information. Special Handling will then annotate the shift log with this information and brief the on-coming shift or B-Bunker personnel.

17.4. Surface explosives shipments are required to enter and exit the base via the South Gate only.

17.4.1. Safe refuge for DoD explosive shipments will be provided upon request. Requests for Safe Refuge will be coordinated through the Travis Command Post. Holding areas for safe refuge vehicles are the railhead (primary) and Hotel Area aircraft parking spots (alternate).

17.4.2. Department of Energy request for Safe Haven will be handled IAW Travis AFB Installation Security Plan, 31-99.

17.4.3. ATOC will ensure the Aerial Port duty officer is informed of the arrival and movement of all explosive shipments during non-duty hours.

18. Air Force Occupational Safety and Health Standard (AFOSH).

18.1. AFOSH training for newly assigned personnel conducted IAW AFI 91-301, *Air Force Occupational and Environment Safety, Fire Protection and Health (AFOSH) Program*, will include explosive hazards and precautions for those personnel engaged in explosives operation.

19. Task Qualification.

19.1. Personnel involved in explosives operations will be trained and qualified in the task to be performed.

19.2. Task qualification will be reflected on individual Special Training Standards (STS), locally developed AF Form 797, **Job Proficiency Guides Continuation Sheets** or AF Form 1098. For example: "inspects and packs distress signal and survival equipment in life rafts"; or inspects, stores, and issues munitions used by security personnel. For civilians, record qualifications on AF Forms 1098 and file with AF Form 971, **Supervisor's Record of Employee**.

19.3. Where task involve the handling and transport of explosives using materials handling equipment and vehicles, individuals must be licensed IAW AFJMAN 24-306, *Manual for the Wheeled*

Vehicle Driver and receive specific training on the use of such equipment in the handling and transport of explosives. Training records (as indicated in Paragraph **19.2.** above) will reflect appropriate qualifications. For example, "Handles, load/unloads, and transports explosives".

19.3.1. Personnel required to use Material Handling Equipment (MHE) will be evaluated annually IAW AFOSHSTD 91-46, *Material Handling and Storage Equipment*.

20. Explosives Storage Licensing.

20.1. Explosive storage and handling locations will be licensed (AF Form 2047) IAW AFMAN 91-201, Paragraph 2.35. These locations will be licensed based on the Department of Defense classification system (**Class/Division 1.2.2, 1.2.3, 1.3, or 1.4 only**).

21. Exceptions to Explosives Licensing Requirements.

21.1. The above licensing requirements do not apply to those locations formally sited for explosives IAW AFMAN 91-201, or to the storage of small arms ammunition, commercial maritime distress signals, and like items in the Base Exchange or family housing. Formally sited explosives locations are identified in **Attachment 2** and **Attachment 3** and on base **Comprehensive Plan- Base Layout Explosives Safety Zones Map, Tab D-8**.

22. Prohibitions.

22.1. Explosives items, including powder and primers for hand loading of ammunition, boating distress signals, amateur rockets and fireworks, will not be stored in dormitories or transient quarters.

22.2. The 60 EMS/MXMW, base munitions personnel, cannot store, or dispose of any commercial munitions/explosives. Units in possession of any commercial explosives requiring disposal must contact 60 CES/CEV for hazardous waste disposal.

22.3. Purchase of any commercial explosive item is strictly prohibited without prior approval and coordination. Detailed procedures are contained in AFI 21-201, and TAFBI 21-202, *Control of Local Purchase Munitions*.

23. Placarding of Explosives Loaded Aircraft.

23.1. A single prominently displayed explosives fire symbol at the nose of aircraft parked on spots H13, H14, S10, S11 and S12 may be used to satisfy explosives loaded aircraft identification requirements. For all other spots, post explosives fire symbols at the front and tail of the aircraft. Full sized fire symbols will be used on spots H13 and H14. Half size fire symbols may be used at all other authorized spots.

24. Mishap Reporting.

24.1. All explosive mishaps (example: damage, inadvertent functioning, involvement in a flight or ground mishap) regardless of the cost involved will be reported to the Weapons Safety Manager. Additionally, all incidents of dropped munitions/explosives, whether any apparent damage occurred or not, will be reported.

25. Exercises Involving Live Explosives.

25.1. All personnel functioning smoke grenades and simulators must complete initial and annual proficiency training provided by 60CES EOD personnel.

25.2. All exercises involving the functioning of live explosives (example: Blank ammunition, smokes, flare, and simulators) must be coordinated with Weapons Safety Manager IAW TAFBI 91-105, *Combat Defense Field Training Exercises*, before scheduling the exercise. This requirement does not apply to the following:

25.3. Explosive Ordnance Disposal Team training conducted on the EOD Proficiency Range.

25.4. Small Arms Training conducted on the Small Arms Firing range.

25.5. Blank Small Arms used by the Base Drill Team.

25.6. Blank Small Arms used for Military Working Dog training.

26. Inspections and Testing of Lightning Protection and Static Ground Systems.

26.1. Inspections and tests of explosives storage area lightning protection and static ground systems are outlined in AFI 32-1065, *Grounding Systems*, Table 1, Category #12, (Non-Hazardous Explosives Area).

26.2. The user will accomplish a visual inspection of all static wire bonds quarterly.

26.3. The user will accomplish a continuity check from equipment to static ground every 24 months.

26.4. Base Civil Engineers will perform a visual inspection of lightning protection systems every 12 months.

26.5. Base Civil Engineers will perform a resistance check on lightning protection earth ground systems and conductivity checks on air terminals, bonds and conductors every 24 months.

26.6. Inspections and tests will be documented. The using agency will be provided a copy of lightning system inspections and test results.

27. Vehicle Accidents Involving DOD Munition and Explosives.

27.1. It is DoD policy that representatives of the military respond as quickly as possible when alerted that a vehicle accident involving DoD munitions or explosives requires a response to help safeguard the public. In such cases, action will be promptly taken to prevent loss of life, injury, and property damage, maintain security, and minimize public inconvenience. Resolution of questions or problems regarding the service or agency having primary responsibility will be a secondary priority after the fact. Assistance will be provided first, and resolution of institutional issues later.

27.2. Travis AFB agencies (for example, Aerial Port, Security Forces, Command Post, etc.) receiving notification or request for assistance on an accident involving a shipment of DoD munitions or explosives will immediately refer the caller to the Travis Command Post.

27.3. Travis Command Post will be notified of all requests for assistance. They in turn will immediately notify the Army Operations Center, or Defense Switch Network, and relay all available information. The Command Post will be the focal point for coordinating Travis' response and assistance efforts.

27.4. Logistics Readiness Squadron will ensure emergency contact telephone numbers and shipment specific hazard information are included on the shipping papers.

28. Weapon Clearing and Transfer Procedures.

28.1. Weapon clearing barrels will be available and used at locations where firearms are routinely issued and stored. Clearing barrels and procedures will meet the standards outlined in AFI 31-207, *Arming and Use of Force for Air Force Personnel* and AFMAN 31-229, *USAF Weapons Handling Manual*.

28.2. If a clearing barrel is not available, firearms may be loaded/unloaded and cleared in an open area as far as practicable from aircraft, equipment, buildings, and personnel. Point the weapons down towards an unpaved surface in a direction presenting the least likelihood of something being struck by an inadvertently discharged round.

28.3. Do not use hand-to-hand transfer of loaded handguns. If a loaded handgun must be transferred between individuals, the person surrendering the weapon will place it on a flat surface, (for example, floor, table top, counter top, vehicle seat, etc.) and the receiver will immediately pick it up and take control.

29. Explanation of Terms.

29.1. **Deviation.** Written authorization that allows specific departure from mandatory explosives safety requirements other than quantity-distance criteria.

29.2. **Explosives.** All ammunition, biological and chemical fillers, demolition material, solid rocket motors, liquid propellants, cartridges, pyrotechnics, mines, bombs, grenades, warheads of all types, explosive elements of ejection and air crew egress systems, explosive components of missile/space systems, and assembled kits/devices containing explosives materials.

29.3. AF Form 2047, **Explosives Facility License.** This license is required for all activities/locations involving storage, handling, or use of explosives outside formally sited locations. Requests for licenses will be submitted to Weapons Safety Manager 60 AMW/SEW for approval.

29.4. **Firearms.** Includes military and privately owned rifles, shotguns, pistols and automatic weapons.

29.5. **Hazardous Materials (HM).** Any material which has flammable, corrosive, oxidizing, explosive, toxic, radioactive, or unduly magnetic properties. (Unduly magnetic means sufficient magnetic field strength is present to cause significant navigational deviations to the compass sensing devices of an aircraft).

29.6. **HM Classification.** Hazardous materials classification system is based on the system recommended for international use by the United Nations organization. Under this system all ammunition and explosives are listed a Class 1, Explosive. Ammunition without explosive components, but which contain toxic chemical agents in bulk, is listed as Class 6, Poisonous (Toxic) and Infectious Substances. Class 1 Explosives are further subdivided into **six** divisions and are normally expressed as class/division 1.1, 1.2.1, 1.2.2, 1.2.3, 1.3, or 1.4. Other HM classes include Class 2 Gases, Class 3 Flammable Liquids, Class 4-Flammable Solids, Class 5 - Oxidizing Substances, Class 6 Poisonous and Infectious Substances, Class 7 - Radioactive Materials, Class 8 - Corrosives, and Class 9 - Miscellaneous.

29.7. **Inhabited Building.** All buildings, locations, or structures, other than explosive locations, used in whole or in part as habitations, places, or assembly for personnel, both within and outside military establishments not directly related to explosives operations. For example: schools, churches, resi-

dences (quarters), passenger terminals, shopping areas, factories, hospitals, theaters, dinning halls, or hangars.

29.8. **Inhabited Building Distance (IBD).** The minimum allowable distance between an inhabited building or non related personnel and a potential explosion site.

29.9. **Net Explosives Weight (NEW).** The actual or high explosives equivalent weight of explosive material contained within a weapon, component, or device.

29.10. **Operating Instruction (OI).** A written procedure covering operations and containing pre-planned steps in logical sequence, along with safety precautions, by which a supervisor expects to accomplish a given job.

29.11. **Waivers.** Written authorization, which permits specific deviation from mandatory explosives quantity distance requirements for a stated period of time.

30. Forms Adopted. DD Form 626, **Motor Vehicle Inspection (Transporting Hazardous Material)**, DD Form 836, **Dangerous Goods Shipping Paper and Emergency Response Information**, AF Form 55, **Employee Safety and Health Record**, AF Form 673, **Request to Issue Publication**, AF Form 797, **Job Proficiency Guides Continuation Sheets**, AF Form 971, **Supervisor's Record of Employee**, AF Form 1098, **Special Task Certification and Recurring Training**, AF Form 2047, **Explosives Facilities License**, and AMC Form 4080, **Load/Sequence Breakdown Worksheet**.

DENNIS M. McCARTHY, Col, USAF
Director Wing Staff

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFJI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Material*

AFI 21-201, *Management and Maintenance of Non-Nuclear Munitions*

AMCI 24-101, Volume 9, *Air Terminal Operations Center*

AFJAM 24-204, *Preparing Hazardous Material for Military Air Shipments*

AFJI 24-211, V4, *Terminal Facilities Guide*

AFJMAN 24-306, *Manual for the Wheeled Vehicle Driver*

AFI 31-207, *Arming and Use of Force for Air Force Personnel*

AFI 32-1065, *Grounding Systems*

AFPD 91-2, *Safety Programs*

AFOSHSTD 91-46, *Materials Handling and Storage Equipment*

TAFBI 91-105, *Combat Defense Field Training Exercises*

AFMAN 91-201, *Explosives Safety Standards*

AFI 91-301, *Air Force Occupational and Environment Safety, Fire Protection and Health (AFOSH) Program*

Code of Federal Regulation Title 49, *Transportation*

T.O. 00-35D-54, *USAF Deficiency Reporting and Investigating System*

T.O. 11A-1-60, *Inspection of Reusable Munitions Containers and Scrap Material Generated from Items Exposed to or Containing Explosives*

AFMAN 31-229, *USAF Weapons Handling Manual*

TAFBI 21-202, *Control of Local Purchase Munitions*

Attachment 2

FORMALLY SITED EXPLOSIVE STORAGE LOCATIONS (A- BUNKER)

| <u>FACILITY</u> | <u>CLASS/DIV</u> | <u>EXPLOSIVE WT.</u> (lbs.) | <u>IB</u> <u>CLEAR</u> <u>ZONE(FT)</u> |
|-----------------|------------------|--------------------------------|--|
| 996 | 1.1 | None | 1250 |
| | 1.2.1>450 | 25,000 | |
| | 1.2.2 | 250,000 | |
| | 1.2.3 | 250,000 | |
| | 1.3 | 250,000 | |
| | 1.4 | Capacity | |
| 994 | 1.1 | None | |
| | 1.2.1 | None | |
| | 1.2.2 | None | |
| | 1.2.3 | None | |
| | 1.3 | None | |
| | 1.4 | Capacity | 100 |
| 992 | (21)1.1 | 50,000 | 2100 |
| | 1.2.1>450 | 250,000 | |
| | 1.2.2 | 250,000 | |
| | 1.2.3 | 250,000 | |
| | 1.3 | 250,000 | |
| | 1.4 | Capacity | |
| 990 | (21)1.1 | 48,000 | 2100 |
| | 1.2.1>450 | 500,000 | |
| | 1.2.2 | 500,000 | |
| | 1.2.3 | 500,000 | |
| | 1.3 | 500,000 | |
| | 1.4 | Capacity | |
| 988 | 1.1 | None | N/A |
| (Inert Storage | 1.2.1 | None | |
| Only) | 1.2.2 | None | |
| | 1.2.3 | None | |

| | | | |
|---------------|-----------|-------------------------------|------|
| | 1.3 | None | |
| | 1.4 | None | |
| 986 | (21)1.1 | 32,000 | 2100 |
| | 1.2.1>450 | 400,000 | |
| | 1.2.2 | 400,000 | |
| | 1.2.3 | 400,000 | |
| | 1.3 | 400,000 | |
| | 1.4 | Capacity | |
| 984 | 1.1 | 225 Per Cell | 1250 |
| | 1.2.1 | None | |
| | 1.2.2 | 1,000 Per Cell | |
| | 1.2.3 | 1,000 Per Cell | |
| | 1.3 | 5,000 Per Cell | |
| | 1.4 | 5,000 Per Cell | |
| 982 | 1.1 | 225 Per Cell | 1250 |
| | 1.2.1 | None | |
| | 1.2.2 | 1,000 Per Cell | |
| | 1.2.3 | 1,000 Per Cell | |
| | 1.3 | 5,000 Per Cell | |
| | 1.4 | 5,000 Per Cell | |
| 980 | 1.1 | 15,000 | 1250 |
| | 1.2.1>450 | 25,000 | |
| | 1.2.2 | 250,000 | |
| | 1.2.3 | 250,000 | |
| | 1.3 | 250,000 | |
| | 1.4 | Capacity | |
| 759 | 1.1 | 425 | 1250 |
| | 1.2.1≤127 | 1,310 | |
| | 1.2.2 | 5,000 | |
| | 1.2.3 | 5,000 | |
| | 1.3 | 5,000 | |
| | 1.4 | Mission Essential Quantity | |
| 983(C-Bunker) | 1.1 | 5,000 | 1250 |
| | 1.2.1>450 | 5,000 | |
| | 1.2.2 | 5,000 | |

| | | | |
|---|------------------|----------|-------------|
| | 1.2.3 | 5,000 | |
| | 1.3 | 5,000 | |
| | 1.4 | Capacity | |
| Railhead | 1.1 | 30,000 | 1250 |
| | 1.2.1 > 450 | 25,000 | |
| | 1.2.2 | 100,000 | |
| | 1.2.3 | 100,000 | |
| | 1.3 | 100,000 | |
| | 1.4 | 100,000 | |
| 959, 960, 961 (COMBINED TO SINGLE SOURCE PES) | (21/18) 1.1 | 80,000 | 2,100/1,800 |
| | 1.2.1 ≥ 450 | 500,000 | |
| | 1.2.2 | 500,000 | |
| | (21) 1.2.3 | 500,000 | |
| | 1.3 | 500,000 | |
| | 1.4 | MEQ | |
| H-13 (TIER-2) | (21) 1.1 | 18,300 | 2,100 |
| | 1.2.1 ≥ 450 | 44,900 | |
| | 1.2.2 | 150,000 | |
| | (13) 1.2.3 | 150,000 | |
| | 1.3 | 150,000 | |
| | 1.4 | MEQ | |
| H-14 (TIER-2) | (18) 1.1 | 38,000 | 1,800 |
| | 1.2.1 ≥ 450 | 150,000 | |
| | 1.2.2 | 150,000 | |
| | (18) 1.2.3 | 150,000 | |
| | 1.3 | 150,000 | |
| | 1.4 | MEQ | |
| 958 | 1.1 | 15,000 | 863 |
| | 1.2.1 ≤ 170 | 2,514 | |
| | 1.2.2 | 500,000 | |
| | (08) 1.2.3 | 500,000 | |
| | 1.3 | 500,000 | |
| | 1.4 | CAPACITY | |
| 968 | 1.1 | 17,000 | 1349 |
| | 1.2.1 ≥ 450 | 55,000] | |
| | 1.2.2 | 500,000 | |

| | | | |
|-----------|------------------|------------------|------|
| | (13) 1.2.3 | 500,000 | |
| | 1.3 | 500,000 | |
| | 1.4 | CAPACITY | |
| 978 | 1.1 | 15,600 | 1000 |
| | 1.2.1 ≤ 241 | 5,700 | |
| | 1.2.2 | 500,000 | |
| | (10) 1.2.3 | 500,000 | |
| | 1.3 | 500,000 | |
| | 1.4 | CAPACITY | |
| EOD RANGE | 1.1 | 5 per detonation | 500 |

Attachment 3

FORMALLY SITED AIRCRAFT PARKING LOCATIONS

| <u>FACILITY</u> | <u>CLASS/DIV</u> | <u>EXPLOSIVE WT. (lbs.)</u> | <u>IB CLEAR ZONE(FT)</u> |
|---------------------------------|------------------|-----------------------------|----------------------------------|
| S-10 | 1.1 | 580 | 1250 |
| | 1.2.1<43 | 139 | |
| | 1.2.2 | 4,478 | |
| | 1.2.3 | 24,000 | |
| | 1.3 | 24,000 | |
| | 1.4 | 25,000 | |
| S-11 | 1.1 | 580 | 1250 |
| | 1.2.1<43 | 139 | |
| | 1.2.2 | 4,478 | |
| | 1.2.3 | 24,000 | |
| | 1.3 | 24,000 | |
| | 1.4 | 25,000 | |
| S-12 | 1.1 | 24,800 | 1250 |
| | 1.2.1<370 | 16,269 | |
| | 1.2.2 | 50,000 | |
| | 1.2.3 | 50,000 | |
| | 1.3 | 25,000 | |
| | 1.4 | 25,000 | |
| MAIN RAMP, SPOT #s: | 1.1 | None | |
| 210,211,212,220, 221,222, 1.2.1 | | None | |
| 230, | | | |
| 231,232,241,251,252, 1.2.2 | | 40 | 115 |
| 261,262, | | | |
| 271,272,281,282, 1.2.3 | | 5,000 | |
| 290,291,292, | | | |
| 310,311,312, 1.3 | | 5,000 | |
| 320,321,322,331, | | | |
| 332,340, 1.4 | | 5,000 | |
| 341,342,410,411,412, | | | |

| | | | |
|--------------------------|-------|-------|-----|
| 420, | | | |
| 421,422,430,431,432,440, | | | |
| 441,510,511,512,513,514, | | | |
| 515, | | | |
| 516,517,518,519,520, | | | |
| 601,602, | | | |
| 603,604,605,606, | | | |
| 607,608,609, | | | |
| 610,611,612,613, | | | |
| 901,902,903,904,905, | 1.1 | None | 211 |
| 906,907,908 | 1.2.1 | None | |
| | 1.2.2 | 600 | |
| | 1.2.3 | 5,000 | |
| | 1.3 | 5,000 | |
| | 1.4 | 5,000 | |

Attachment 4

FORMALLY SITED AIRCRAFT PARKING OVERVIEW



